

### PRESIDENT

Jim Warner 23 June Street Auburn, MA 01501 (508) 752-8328

### VICE-PRESIDENT

Jim Cahoon 31 Parker St. Maynard, MA 01754 (978) 897-8221

### SECRETARY

Patricia Barker P.O. Box 810 Campton, NH 03223 (603) 536-2401

### TREASURER

Janet Cares 18 Singletary Lane Sudbury, MA 01776 (508) 443-9180

### **EDITOR**

Johannes Swarts PO Box 246 E. Randolph, VT 05041-0246 (802) 728-3336 email: johannes@gdt1.com fax: (603) 643-6808

Dues are \$7.00/year and due on January 1st, payable to the treasurer.

News items for the *Newsletter* are welcome and should be submitted to the Editor. The *Newsletter* may be quoted if credit is given.

The Club address is c/o Editor

## Upcoming Meetings

<see the listing this page>

# MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

#209

October, 1998

The MMNE was organized on November 8, 1966, for the purpose of promoting the study of minerals that require a microscope.

### Next meeting

The next meeting will be held on Saturday, October 10<sup>th</sup> (not the 9<sup>th</sup>, as indicated in last month's newsletter) at Forrest and Vera Foggs' in Dunbarton, NH. As usual we will have a potluck lunch, so leave your brown bags at home, but bring a contribution of a hot dish, cold cuts, salad, or dessert to share. There will be no formal program, but much to enjoy at the peak of the fall foliage season. My drive over to the Fogg residence last year was on one of those brilliant days when the trees seem aflame, and the view from the house is quite spectacular!

### MMNE calendar

Future meeting places have been confirmed as shown below through May, 1999. All meeting days are on Saturday.

November 14th	Burlington, MA Public Library	10 AM
December	no meeting	
January 9 <sup>th</sup>	Auburn, MA Public Library	9 AM
	(snow date Jaunuary 16 <sup>th</sup> )	
February 6 <sup>th</sup>	Fletcher Library, Westford, MA	10 AM
March 13 <sup>th</sup>	Northboro, MA Public Library	9:30 AM
April 17 <sup>th</sup>	Fairbanks Senior Center, Sudbury, MA	9 AM
May 15 <sup>th</sup>	Moose Lodge, Marlboro, MA	9 AM

Maps will appear in the appropriate newsletters. As you will notice from the above listing, we have found a place to hold our May symposium. See our secretary's notes for more details. Thanks to Janet Cares for her diligence!

We have been able to obtain a number of copies of George Robinson's book *Minerals*, which, in addition to being beautifully illustrated in color, presents a clear and different approach to the study of minerals. We plan to donate a copy to each library where we meet in appreciation for the use of their facilities.

### A correction

Last month's newsletter indicated that the office of the treasurer was vacant. Janet Cares informs us that she has not resigned and the treasury remains under her care. I regret the misunderstanding.

I'd also like to apologize for any typos that may have appeared in last month's newletter – the temporary loss of my computer hard drive made the publication of the newsletter a bit of a rush job.

### New officer

MMNE member Jim Cahoon has graciously stepped forward to accept the postion of vice president. His nomination was voted on at the September meeting and unanimously approved.

### May symposium sales table

As was mentioned in the September newsletter, we have an opportunity to obtain material for the May symposium sales table though trade with the Southern California Micro-Mineralogists. I would be willing to accept packages of mounted specimens (accompanied by a brief description of the material) and gather them together into a single shipment. Their symposium is in January, so quick action is of the essence.

### MICROMOUNTER'S MEETING SEPT. 12, 1998

The September 12 meeting was called to order at the public library in Hudson, Ma.. with 14 members present. The Treasurer's Report was presented by Treasurer Janet Cares. We have \$5, 039.95 cash-on-hand with insurance due in October and Federation dues coming up.

Janet said she would like the Club to consider having a Membership Chairman who would be responsible for accepting dues of new and old members, distribute the membership cards, and keep the editor of the bulletin informed about new members.

### OLD BUSINESS:

An appeal for a Vice President for this organization was answered at this meeting by member Jim Cahoon. His nomination was voted on and unanimously approved with thanks.

Secretary Pat read the notes she had taken at the May Meeting.

Janet told us that we had made \$700.00 from donated specimens at the May Meeting this year!

Bill member of the M.of N.E. and speaker at that meeting returned his honorarium and requested that it be donated to the <u>Mineralogical Record</u>'s Color Fund. This was done, and Janet read us the letter she received from Wendell Wilson Editor of the <u>Mineralogical Record</u> thanking us for this donation.

### NEW BUSINESS:

Janet gave us the most welcome news that she has found a most promising location for our May Meeting next year: the Royal Order of the Moose hall in Marlborough near where Routes 290 and 495 meet. The rental will be \$5.00 per person for the hall, which is twice the size of the 4H hall. They have a caterer who will submit a menu for a \$10.00 barbecue, or we can hire a caterer of our choice. They also have a nice covered picnic area. As an added incentive, they will provide free coffee all day long. Janet has rented this hall for the 15th of May, and she suggested that we continue this "Saturday after Mother's Day Weekend" date from now on. We have had so many conflicts in recent years with the Mother's Day Weekend Saturday that the new proposal met with the approval of all present and was voted on and unanimously approved. Jim thanked Janet for her efforts to find a new meeting place over the past 6 months.

Respectfully submitted, Patricia Berry Barker, Secretary

### Sixteenth Annual May Meeting of the Micromounters of New England May 9, 1998

The annual Micromounters Northeast May Meeting was somewhat of a bittersweet affair this year even though it was a success in every way. The weather was cool and rainy, drizzly; in other words, perfect. No one would have been tempted to be out field collecting. But behind all the pleasure of attending this meeting was the nagging thought: "We probably won't be coming back to the Ashland 4-H Center". Despite problems here and there with the constantly changing management, that Janet Cares was usually able to iron out, we really enjoyed being in that pleasant country setting: picnic lunches out of doors, lovely spring flowers blooming on the grounds, delightful walking trails, and the easy to reach location off Route 495. Those of us who used to stay over night, remember with nostalgia the fun of eating out at one of the local restaurants, and staying up very late looking at micros and talking about them. Then next morning: early breakfast snacks and more mineral talk before the rest of the gang appeared.

Now that the day rental will be almost doubled next year, this puts the 4-H Center pretty much beyond our modest club funds.

It was fitting that our speaker this year was good friend and Micromount Hall of Famer: Dr. William Henderson, Jr.. It was Bill who gave the lecture at our very first May Meeting! That was held in the Science Museum in Springfield, Ma. on May 1st. 1982. He spoke then on "Non-Pegmatite Phosphate minerals". This time his lecture was on Zeolites - The New Classification". As always, Bill gives a terrific lecture presented along with his superb photomicrography.

Margaret Stewart did a great job as Registrar, with all the work that that entails. Edna Lerer had prepared a triumph of a Sale Table, and it was a very popular place, with the attending 47 micromounters going back numerous times to purchase the little treasures. Edna deserves our very enthusiastic applause for her efforts every year.

Betty Sevrens and Phyllis Leighton once again kept the snack table organized and running smoothly.

Marilyn Dodge donated two lovely mineral photographs for the raffle; the tickets were hotly purchased. This is such a nice donation, Marilyn. Thanks so much.

We had such a pile of give-away minerals this year that it was overwhelming! Steve Cares had painstakingly prepared several hundred cards of minerals (many given to him only several weeks beforehand). Also this year, John and Margaret Stewart had collected tiers of egg crates from their cellar and shed, as well as egg crate donations from the monthly give-away table. Many other members brought in some fine give-a-ways this year, which was much appreciated.

Jim Warner our in-coming President gave a nice thank you tribute to Steve and Janet for all they do for our organization. This was especially true this year. There was an all new management at the 4-H. It was definitely because of Janet's persistence that we were able to be at the Ashland site for one more time. Every week it seemed there was one more "rule" or "regulation" thrown at her. This made for an extremely trying situation. Janet also prepared the brochure for the May Meeting, and she ran into printing problems, but still managed to make the deadline. The President admonished all present to be on the look out for a new hall for May 1999.

Submitted by Pat Berry Barker

# MINERAL DEPOSITS OF THE LOVOZERO MASSIF

# (or Russian Kola — Rarities on the Rocks)

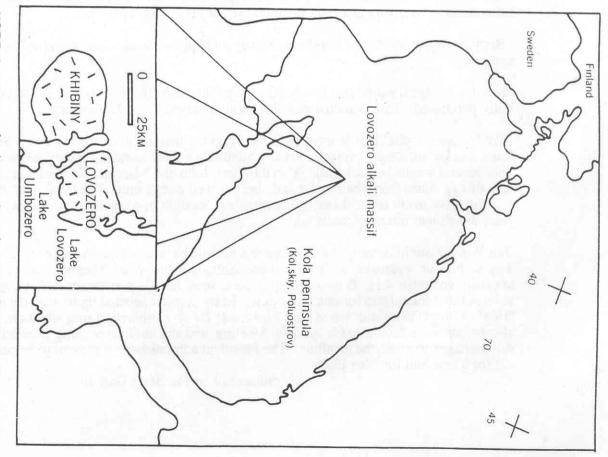
The Lovozero alkali massif, located in the Kola Peninsula, province of Murmansk in the Soviet Union, is one of the most diversified mineral deposits in the world. Over 165 species are known to occur there, and seven species entirely new to science were described from there in 1981 alone.

The massif itself is divided in half by Lake Umbozero with the eastern portion being the Lovozero massif in the classical literature and the western portion is variously termed "Khibiny" by modern workers. The Khibiny complex has been thoroughly studied and has clearly produced the larger number of mineral species. The major rock types of the district were intruded into Pre-cambrian gneisses and schists and are composed primarily of nepheline-sodalite syenite, foyaite, lujavrite, and urtite — all very low in silica and hence composed of mineral assembleges not often encountered. Over ninety percent of the Lovozero massif is eudialyte-lujavrite.

The key reason for the Kola Peninsula's rare mineral fame, however, is due to the pegmatites. The rare rocks probably could not account for more than twenty rock-forming mineral species, but the pegmatites have yielded almost all of the species. The residual liquids which formed the pegmatites were enriched in elements commonly encountered in granite pegmatites: Be, Mn, R.E.E., Nb, P, Na, K, etc., but the dramatic abundance of Ti, Zr, Ba, and Sr also provided the starting material from which crystallized many "rare" minerals. The "common" rock-forming species in the Lovozero pegmatites include eudialyte, lamprophyllite, murmanite, ussingite, aenigmatite, polylithionite, nenadkevichite, nepheline, natrolite, sodalite, etc.

The mineralogical oddity of the Kola rocks has made them economic sources of commercially important elements. Nepheline is the ore of aluminum, loparite is mined for rare earth elements, while there is also an igneous source for phosphorus in fluorapatite.

Collecting specimens is severely restricted at the Lovozero massif even for indigenous scientists, as it is located within the confines of an Army installation. (Similar fates have prevented collecting at the favalite crystal locality near Coso Hot Springs, California, USA and the forsterite crystal locality on St. Johns Island, Egypt.) Many of the specimens that have been available for reference collections outside of the Soviet Union were collected on the famous field trip led by Alexander Fersman at the 1930s International Geological Congress meeting in Russia. The field trip was heavily escorted by soldiers while on the base. The resourceful scientists loaded down the soldiers with geological samples, thus assuring the distribution and preservation of many unusual and interesting specimens.



NOTE:Lovozero is known to micromounters as the source of many rare species also found at Mont St-Hilaire. This brief description is taken from the publication "Collector's Corner" of Ward's Natural Science Establishment, Inc., November, 1982, and used with their permission.

### ROCKHOUNDING

Wearing my rockhound sneakers. I headed West, I turned right around the blue spruce, and, continuing straight ahead, climbed through the lawn mowers, jumped over the fossil ferns, tip-toed through St. Johnsville, and around Moat Mt. and came up abruptly at Cape Split. I found the task of digging through a hill of boxes and garbage rock was too much at that time. Another pair of hands was necessary to reach the good collecting area, so I by-passed Cape Split, rounded the corner, and swung neatly over Cascade Falls toward St. Hilaire. Down beside a stack of lumber, almost under a braided rug, I found the siderite hole, with some lovely calcites and siderites. Taking a few specimens, I returned by a more westerly route, past Big Hill, over a stack of lumber, narrowly missing a fall into East Haven and Summit, emerging with a clatter from the old armchair into the trash cans, and back home with a side glance at the Prehnite quarry under the blue spruce.

My next trip will be down in the dungeon beside the old well, where all kinds of things grow in the dark, damp, and spider webs.

Written about 1985 by Margaret Stewart